UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/692,720	10/20/2000	Shunichi Sekiguchi	1163-299P	5613

7590	12/19/2005	

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EXAMINER
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ART UNIT	PAPER NUMBER
2613	

DATE MAILED: 12/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Office Action Summary	Application No.	Applicant(s)
		09/692,720	SEKIGUCHI ET AL.
		Examiner	Art Unit
		Nhon T. Diep	2613

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>23 September 2005</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *2,3,5 and 24-30* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *2,3,5 and 24-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *20 October 2000* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All   b)☐ Some * c)☐ None of:

        1.☒ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Response to Arguments

1.   Applicant's arguments filed 9/23/2005 have been fully considered but they are

not persuasive.

With respect to the applicants' arguments concerning claims 2 (page 8, lines 12-

14), 3 (lines 6-10 and 5 (lines 1-4), the examiner notes that these arguments are not

clear as to what parts or limitations of the claims that prior art fails to show, teach or

suggest, the arguments just argued that the cited passages fail, no specific reasons

provided.

The examiner tries to show again, why the cited column meets the limitations as

claimed:

Re. claim 2: The applicants argued that Matsumura et al (US 5,835,144), col. 9,

lines 45-49, which states "If an error occurred in the variable-length decoding, the

source decoder 15 replaces entire macroblock from the point of error up to the

resynchronization point with the equivalent macroblocks from the previous frame in the

moving picture sequence fails to teach or suggest "upon detecting a decoding

error...the position of said decoding error in said coded video stream is decided based

on an error detection result received and error concealment is selectively performed

based on said decided position of said decoding error." of claim 2 (page 8, lines 1-14).

It is the examiner's interpretation that "the position of error of said decoding error is

decided based on error detection" (error occurred in the variable length decoding, the

point of error = position of error is decided) and then "error concealment is selectively

performed based on said position of said decoding error", this is met by the replacement of entire macroblocks from the point of error up to the resynchronization point. The examiner will clarify his point again when the applicants can be more specific about what parts of the claims that Matsumura et al does not meet.

Re claim 3: The applicants argued that Matsumura et al fails to teach or suggest and then the Office Action failed to establish prima facie obviousness of claim 2 and again, the argument does not specifically state why. Claim 3 claims "based on said error detection result received together with each data stream and the position of said decoding error detected in the decoding of each of data stream, it is decided whether to perform error concealment using decoded motion vector or abandon said motion vectors and said texture data and perform concealment". The examiner interprets the above limitation as that error concealment is performed with or without using motion vector and in the 103 rejection, it is reasoned that, since Matsumura et al teaches inter frame prediction and motion compensation and because when error occurred in the variable-length decoding, there is a fair chance that error contaminates the motion vector and if that is the case, motion vector and associated texture data should be abandon in any following error concealment effort to avoid further error propagating or, if error does not contaminates motion vector, then use decoded motion vector.

Re claim 5: Again, the applicants only argued that "although the cited portion (col. 8, lines 40-50) supports the conclusion that the video decoder described therein perform resynchronization, applicants note that Matsumura et al utilizes a self-resynchronization variable-length code. The video decoding apparatus of Matsumura

does not perform resynchronization in the manner recited in claim 5, which is "upon

detecting a decoding error during decoding of said coded video stream received for

each packet, the position of resynchronization is decided based on said unique code

and said error detection received together with coded data of said header information

and resynchronization is perform from the bit position of error detection to a unique

code indicating the beginning of the next block coded data." The examiner maintains

that, limitation of "the position of resynchronization is decided based on said unique

code and said error detection received together with coded data of said header

information is met" by col. 8, line 41 – col. 9, line 12, which states multiplex decoder to

decide whether synchronization has been recovered and ... the decoder identifies the

point at which synchronization was recovered referred to below as the

resynchronization points; and limitation of "resynchronization is perform from the bit

position of error detection to a unique code indicating the beginning of the next block

coded data.", is met by figure 10, el. A4-A5 read in conjunction with col. 9, lines 13-25,

wherein the resynchronization is processed until a new start code is detected.

Having answered all of the applicants' generic arguments with regard to claims 2-

3 and 5, the examiner maintains all of his previous rejections and is repeated as below:

Claim Rejections - 35 USC § 102

2.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by
another filed in the United States before the invention by the applicant for patent or (2) a patent
granted on an application for patent by another filed in the United States before the invention by the

applicant for patent, except that an international application filed under the treaty defined in section
351(a) shall have the effects for purposes of this subsection of an application filed in the United States
only if the international application designated the United States and was published under Article 21(2)
of such treaty in the English language.

3.   Claims 2, 5 and 24-25 are rejected under 35 U.S.C. 102(e) as being anticipated

by Matsumura et al (US 5,835,144) as set forth in the previous Office Action.

Claims 2 and 5 are rejected under 35 U.S.C. 102(e) as being anticipated by

Matsumura et al (US 5,835,144) as set forth in the previous Office Action; Matsumura et

al further discloses said plural kinds of data elements include coded macro block DCT

coefficient data and motion vector data (col. 4, In. 11-18 and col. 5, In. 26-28) as

specified in claim 24; and said coded video stream is divided into packets at points of

change in the kind of said data elements so that motion vector data is provided in

separate packets than macro block DCT coefficient data (fig. 4, el. 27: MVD=motion

data is separated from BLOCK DATA=coefficients) as specified in claim 25.

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set
forth in section 102 of this title, if the differences between the subject matter sought to be patented and
the prior art are such that the subject matter as a whole would have been obvious at the time the
invention was made to a person having ordinary skill in the art to which said subject matter pertains.
Patentability shall not be negatived by the manner in which the invention was made.

5.   Claims 3 and 26-30 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Matsumura et al (US 5,835,144).

As applied to claim 2 above, Matsumura et al further discloses said plural kinds

of data elements further include coded video packet header data (fig. 4, el. PSC

PHEAD) as specified in claim 27; said plural kinds of data elements further include a

resynchronization marker, which is detected during decoding to indicate the beginning

of the next block coded data (col. 8, line 41 – col. 9, line 12) as specified in claim 30. It

is noted that Matsumura et al does not particularly disclose that based on said error

detection result received together with each data stream and the position of said

decoding error detected in the decoding of said each data stream, it is decided whether

to perform error concealment using decoded motion vectors or abandon said motion

vectors and said texture data and perform error concealment as specified in claim 3; or

based on the error detection result received for a packet containing motion vector data,

said method abandons corresponding coded macro block DCT coefficient data and

performs error concealment as specified in claim 26; or wherein, based on the error

detection result received for a packet containing video packet header data, said method

abandons corresponding coded macro block DCT coefficient data and performs error

concealment as specified in claim 28; or wherein, said method performs error

concealment for a packet containing coded macro block DCT coefficient data using

motion information when a deciding error did not occur for the motion information as

specified in claim 29. Since, Matsumura et al further discloses many ways of checking

for errors (col. 8, ln. 55-64 and that inter frame prediction and motion compensation, this

disclosure implies that when one cannot recover the motion vector, one cannot

reconstruct the current frame based on the previous and/or future frames and therefore,

it would have been obvious to one of ordinary skilled in the art at the time the invention

was made to modify the system of Matsumura et al by either using decoded motion

vectors when the motion vector is not severely corrupted or abandon said motion

vectors and said texture (macroblock) data when the motion vector is severely

corrupted in performing error concealment. Doing so would help to prevent error

propagating into the next frames.

Conclusion

6.   Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37

CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.

7.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Nhon T. Diep whose telephone number is 571-272-

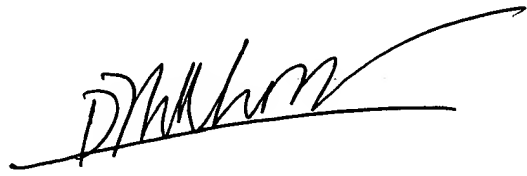7328. The examiner can normally be reached on m-f.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Mehrdad Dastouri can be reached on 571-272-7418. The fax phone

number for the organization where this application or proceeding is assigned is 571-
273-8300.

Information regarding the status of an application may be obtained from the

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published applications may be obtained from either Private PAIR or Public PAIR.

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For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

ND
12/5/2005

NHON DIEP
PRIMARY EXAMINER